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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,996	07/20/2005	Carl William Riley	7175-202356	6694

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BARNES & THORNBURG, LLP
11 SOUTH MERIDIAN STREET
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EXAMINER

SANTOS, ROBERT G

ART UNIT	PAPER NUMBER
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3673

MAIL DATE	DELIVERY MODE
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01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,996	Applicant(s) RILEY ET AL.	
	Examiner Robert G. Santos	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/12/04, 7/20/05, 6/0707 & on 10/17/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-38, 61-67 and 74-89 is/are pending in the application.
- 4a) Of the above claim(s) 17-20, 25, 27-31, 37, 38, 63-66, 76, 80-82, 87 and 88 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16, 21-24, 26, 32-36, 61, 62, 67, 74, 75, 77-79, 83-86 and 89 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 17-20, 25, 27-31, 37, 38, 63-66, 76, 80-82, 87 and 88 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 17, 2007.

Specification

2. The disclosure is objected to because of the following informalities: On page 17, in lines 8 and 9: The number "310" should be changed to --410--.
Appropriate correction is required.

Claim Objections

3. Claims 15, 23, 26, 34 and 79 are objected to because of the following informalities:

- 1) In claim 15, line 7: The term "receiver" should be changed to --detector--.
- 2) In the last line of claim 23: "frame;" should be deleted.
- 3) In the first line of claim 26: The number "21" should be changed to --22--.
- 4) In the second line of claims 34 and 79: "MHz" should be changed to --kHz-- (in order to correspond with the value stated on page 20, in lines 3, 4 and 14 of the specification).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15 and 74 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,208,250 to Dixon et al. Dixon et al. show the claimed limitations of a patient support apparatus (10) comprising a base frame (12, 18); an elevating frame (19, 20) configured to move along a path of travel above the base frame; a patient support surface (22) supported by the elevating frame; a detector (70) supported by the base frame and being configured to detect and obstacle within the path of travel of the elevating frame and provide a control signal in response thereto (as shown in Figure 3 and as described in column 16, lines 11-20); and a control unit (50) in communication with the detector and configured to prevent lowering of the elevating frame in response to the control signal (as described in column 16, lines 20-22).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16, 21-24, 26, 36, 61, 62, 67, 75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon et al. '250 in view of U.S. Pat. No. 5,758,371 to VanDyke et al.

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As concerns claims 16, 21, 22, 26, 36, 61, 62, 75 and 77, Dixon et al. do not specifically disclose a condition wherein the emitter (70, as specifically described in column 16, lines 16-17) comprises an infrared light source that inherently generates a wireless signal. VanDyke et al. provide the basic teaching of a patient support comprising infrared sensors for detecting nearby obstacles (as described in column 15, lines 3-13). The skilled artisan would have found it obvious at the time the invention was made to provide the patient support apparatus of Dixon et al. with an emitter comprising an infrared light source that inherently generates a wireless signal since the use of infrared sensors disposed on patient support devices for detecting nearby obstacles has long been known in the art as taught by VanDyke et al. With respect to claims 23 and 67, Dixon et al. further teach the use of a lifting device (as described in column 16, lines 21-22) configured to move the elevating frame vertically relative to the base frame and an articulating deck (22) that is movable relative to an elevating frame (19) (as shown in Figure 3 and as described in column 7, lines 30-35). As concerns claims 24 and with further regards to claim 61, Dixon et al. disclose a condition wherein the control unit provides a stop signal to prevent operation of the lifting device upon a "rapid change in the output signal [from the detector]" (see column 16, lines 19-22) as opposed to being responsive to a failure to detect the output signal. The skilled artisan would have found it obvious at the time the invention was made to provide the patient support apparatus of Dixon et al., as modified by VanDyke et al., with a control unit which prevents operation of the lifting device upon *any* change in the output signal, including an interruption in the signal, since such a modification would have been generally recognized as being within the level of ordinary skill in the art.

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8. Claims 32-35, 78, 79, 83-86 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon et al. '250 in view of VanDyke et al. '371, and further in view of U.S. Pat. No. 3,970,846 to Schofield, Jr. et al. With regards to claims 32, 33, 78, 83-86 and 89, Dixon et al., as modified by VanDyke et al., do not specifically disclose the use of an indicator in communication with the control unit, wherein the indicator is configured to indicate failure of the receiver to detect the wireless signal, and wherein the wireless signal includes a pulsed portion having a predefined frequency such that the receiver is configured to detect the predefined frequency. Schofield, Jr. et al. provide the basic teaching of a presence detecting system comprising a control unit (44), an emitter (20, 32), a receiver (22, 34), and an indicator (40) in communication with the control unit, wherein the indicator is configured to indicate failure of the receiver to detect the wireless signal generated by the emitter, and wherein the wireless signal includes a pulsed portion (E) having a predefined frequency such that the receiver is configured to detect the predefined frequency (as shown in Figures 2 & 3 and as described in column 4, lines 64-68; column 5, lines 1-4; column 6, lines 24-27; and column 9, lines 36-41). The skilled artisan would have found it obvious at the time the invention was made to provide the patient support apparatus of Dixon et al., as modified by VanDyke et al., with the additional structure of an indicator in communication with the control unit, wherein the indicator is configured to indicate failure of the receiver to detect the wireless signal, and a wireless signal that includes a pulsed portion having a predefined frequency such that the receiver is configured to detect the predefined frequency, in order to readily and efficiently ensure proper functioning of the presence detecting system of the patient support apparatus, thereby ensuring further proper support and comfort of a patient positioned on the apparatus.

As concerns claims 34, 35 and 79, Dixon et al., as modified by VanDyke et al. and as further modified by Schofield, Jr. et al., do not specifically disclose the particular frequency and duration of the signal as claimed. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the patient support apparatus of Dixon et al., as modified by VanDyke et al. and as further modified by Schofield, Jr. et al., with a wireless signal that includes a pulsed portion having the particular frequency and duration as recited in Applicants' claims, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

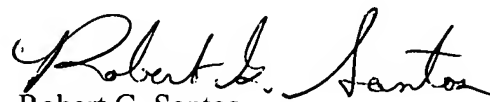
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dixon et al. '600, Menkedick et al. '312, Rocher et al. '612, Menkedick et al. '731, Menkedick et al. '730, Menkedick et al. '079, Gladney '459, Rocher et al. '777, Riley et al. '601, Gladney '499, Menkedick et al. '405, Dixon et al. '324, Dixon et al. '871, Gladney '052, Dixon et al. '460, Dixon et al. '037, Menkedick et al. '510, Futsuhara et al. '228, Weismiller et al. '769, Johnson et al. '216, Heaton et al. '288, Sebring '166, Sebring '271, Hamada et al. '877, Carroll et al. '920, Yindra '403, Martin '077, Denton '262, Kaneko '463, Wolar '214 and Wolar '061.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Santos whose telephone number is (571) 272-7048. The examiner can normally be reached on Tues-Fr and first Mondays, 10:30 a.m. to 8:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert G. Santos
Primary Examiner
Art Unit 3673

R.S.
January 11, 2008